

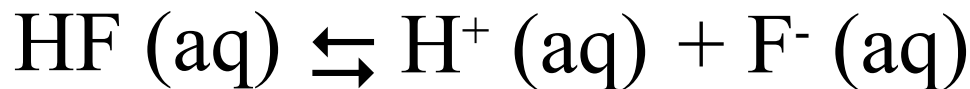
Calculate the pH of a **0.100** M HF solution **pH = 2.10**

$$\% \text{ ionization} = \frac{[\text{H}^+]}{[\text{HF}]} \times 100 = \frac{7.91 \times 10^{-3}}{0.10} \times 100 = 7.91 \%$$

Calculate the pH of a **0.010** M HF solution **pH = 2.64**

$$[\text{H}^+] = 2.3 \times 10^{-3}$$

$$\% \text{ ionization} = \frac{2.3 \times 10^{-3}}{0.010} \times 100 = 23\%$$



1 mol solute **2 mol** solute



increase concentration